

### Claims

- 5 1. A method for detecting non-responders to anti-TNF therapy, comprising testing an individual for homozygosity for at least one single nucleotide polymorphism in the gene coding for the TNF Receptor II.
- 10 2. The method of claim 1, wherein anti-TNF therapy is infliximab therapy.
3. The method of claim 1, wherein anti-TNF therapy is therapy of Crohn's disease.
- 15 4. The method of claim 2, wherein anti-TNF therapy is therapy of Crohn's disease.
- 20 5. The method of claim 1, wherein the at least one single nucleotide polymorphism is nucleotide substitution T/G at position 587 from the transcription starting site in exon 6 of the gene coding for the TNF Receptor II.
- 25 6. The method of claim 1, wherein the at least one single nucleotide polymorphism is nucleotide substitution A/G at position 168 from the transcription starting site in exon 2 of the gene coding for the TNF Receptor II.
- 30 7. The method of claim 5, comprising identifying the mutation T/G at position 587 by a technique suitable therefor.

8. The method of claim 6, comprising identifying the mutation A/G at position 168 by a technique suitable therefor.
- 5 9. The method of claim 1, comprising the use of blood cells for providing DNA.
- 10 10. Use of a polymorphism at position 168 (A/G) in exon 2 of the gene coding for the TNF Receptor II for diagnostic purposes.
- 10 11. The use of claim 10 in an inflammatory or malignant or other chronic disease.
12. The use of claim 11 in Crohn's disease.
- 15 13. The use of claims 10 in anti-TNF therapy.
14. Use of a polymorphism at position 587 (T/G) in exon 6 of the gene coding for the TNF Receptor II in Crohn's disease.
- 20 15. Use of a polymorphism at position 587 (T/G) in exon 6 of the gene coding for the TNF Receptor II in anti-TNF therapy.
- 25 16. A kit comprising reagents tailored to identify the polymorphism at position 168 (A/G) in exon 2 of the gene coding for the TNF-Receptor II.
17. A kit comprising reagents tailored to identify the polymorphism at position 587 (T/G) in exon 6 of the gene coding for the TNF-Receptor II.

18. A kit comprising reagents tailored to identify the polymorphism at position 168 (A/G) in exon 2 and the polymorphism at position 587 (T/G) in exon 6 of the gene coding for the TNF-Receptor II.

5 19. Gene having the nucleotide sequence identified in SEQ ID NO 51 or a nucleotide sequence coding for the same peptide or a peptide having the same immunological properties.

10 20. Gene having the nucleotide sequence identified in SEQ ID NO 53 or a nucleotide sequence coding for the same peptide or a peptide having the same immunological properties.

15 21. Peptide having the sequence identified in SEQ ID NO 52 or a peptide having the same immunological properties.

22. Peptide having the sequence identified in SEQ ID NO 54 or a peptide having the same immunological properties.

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